



PTO/SB/08a/b (08-03)
 Approved for use through 07/31/2006. OMB 0651-0031
 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Substitute for form 1449A/B/PTO	
			Complete if Known	
			Application Number	09/530,233
			Filing Date	April 26, 2000
			First Named Inventor	Philippe Sequela
			Art Unit	1646
Examiner Name	Michael D. Pak			
Attorney Docket Number	PCI-017USRCE2			
Sheet	1	of	3	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY			
MWP	A1	WO 97/01577 A1	01-16-1997	University College London		
	A2	WO 98/54316 A1	03-12-1998	Synthe-Lab		
MWP	A3	WO 98/35034 A1	08-13-1998	Centre Nat Rech Scient		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
MWP	A4	Adams, <i>et al.</i> Ripped pocket and pickpocket, novel Drosophila DEG/ENAC subunits expressed in early development and in mechanosensory neurons. J Cell Biol. 1998 Jan 12;140(1):143-52.		
↑ ↓	A5	Babinski, <i>et al.</i> Molecular cloning and regional distribution of a human proton receptor subunit with biphasic functional properties. J Neurochem. 1999 Jan;72(1):51-7.		
	A6	Bassilana, <i>et al.</i> The acid-sensitive ionic channel subunit ASIC and the mammalian degenerin MDEG form a heteromultimeric H ⁺ -gated Na ⁺ channel with novel properties. J Biol Chem. 1997 Nov 14;272(46):28819-22.		
	A7	Bertrand, <i>et al.</i> Electrophysiology of Neuronal Nicotinic Acetylcholine Receptors Expressed in Xenopus Oocytes Following Nuclear Injection of Genes of cDNAs. <u>Methods in Neurosciences</u> , 1991, Academic Press Inc., New York, pp. 174-193.		
	A8	Bevan, <i>et al.</i> Nerve growth factor (NGF) differentially regulates the chemosensitivity of adult rat cultured sensory neurons. J Neurosci. 1995 Jul;15(7):4918-26.		
	A9	Bevan, <i>et al.</i> Protons activate a cation conductance in a sub-population of rat dorsal root ganglion neurones. J Physiol. 1991 Feb;433:145-61.		
↓	A10	Canessa, <i>et al.</i> Amiloride-sensitive epithelial Na ⁺ channel is made of three homologous subunits. Nature. 1994 Feb 3;367(6462):463-7.		
MWP	A11	Chen, <i>et al.</i> A sensory neuron-specific, proton-gated ion channel. Proc Natl Acad Sci U S A. 1998 Aug 18;95(17):10240-5.		

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete If Known	
				Application Number	09/530,233
				Filing Date	April 26, 2000
				First Named Inventor	Philippe Sequela
				Art Unit	1646
				Examiner Name	Michael D. Pak
Sheet	2	of	3	Attorney Docket Number	PCI-017USRCE2

uap	B1	Corey, <i>et al.</i> Mechanosensation and the DEG/ENaC ion channels. <i>Science</i> . 1996 Jul 19;273(5273):323-4.	
↑	B2	Coscoy, <i>et al.</i> The Phe-Met-Arg-Phe-amide-activated sodium channel is a tetramer. <i>J Biol Chem</i> . 1998 Apr 3;273(14):8317-22.	
	B3	Dray, <i>et al.</i> Bradykinin and inflammatory pain. <i>Trends Neurosci</i> . 1993 Mar;16(3):99-103.	
	B4	Firsov, <i>et al.</i> The heterotetrameric architecture of the epithelial sodium channel (ENaC). <i>EMBO J</i> . 1998 Jan 15;17(2):344-52.	
	B5	Garcia-Anoveros, <i>et al.</i> BNaC1 and BNaC2 constitute a new family of human neuronal sodium channels related to degenerins and epithelial sodium channels. <i>Proc Natl Acad Sci U S A</i> . 1997 Feb 18;94(4):1459-64.	
	B6	Ishibashi, <i>et al.</i> Molecular cloning of a DEG/ENaC sodium channel cDNA from human testis. <i>Biochem Biophys Res Commun</i> . 1998 Apr 17;245(2):589-93.	
	B7	Krishtal, <i>et al.</i> A receptor for protons in the membrane of sensory neurons may participate in nociception. <i>Neuroscience</i> . 1981;6(12):2599-601.	
	B8	Krishtal, <i>et al.</i> Rapid extracellular pH transients related to synaptic transmission in rat hippocampal slices. <i>Brain Res</i> . 1987 Dec 15;436(2):352-6.	
	B9	Lindahl. Pain - A General Chemical Explanation. <i>Adv. Neurol.</i> 1974. 4:45-47.	
	B10	Lingueglia, <i>et al.</i> Cloning of the amiloride-sensitive FMRFamide peptide-gated sodium channel. <i>Nature</i> . 1995 Dec 14;378(6558):730-3.	
	B11	Lingueglia, <i>et al.</i> A modulatory subunit of acid sensing ion channels in brain and dorsal root ganglion cells. <i>J Biol Chem</i> . 1997 Nov 21;272(47):29778-83.	
	B12	North. Families of ion channels with two hydrophobic segments. <i>Curr Opin Cell Biol</i> . 1996 Aug;8(4):474-83.	
	B13	Price, <i>et al.</i> Cloning and expression of a novel human brain Na ⁺ channel. <i>J Biol Chem</i> . 1996 Apr 5;271(14):7879-82.	
	B14	Snyder, <i>et al.</i> Electrophysiological and biochemical evidence that DEG/ENaC cation channels are composed of nine subunits. <i>J Biol Chem</i> . 1998 Jan 9;273(2):681-4.	
	B15	Tavernarakis, <i>et al.</i> unc-8, a DEG/ENaC family member, encodes a subunit of a candidate mechanically gated channel that modulates <i>C. elegans</i> locomotion. <i>Neuron</i> . 1997 Jan;18(1):107-19.	
	B16	Ugawa, <i>et al.</i> Receptor that leaves a sour taste in the mouth. <i>Nature</i> . 1998 Oct 8;395(6702):555-6.	
	B17	Waldmann, <i>et al.</i> The mammalian degenerin MDEG, an amiloride-sensitive cation channel activated by mutations causing neurodegeneration in <i>Caenorhabditis elegans</i> . <i>J Biol Chem</i> . 1996 May 3;271(18):10433-6.	
✓	B18	Waldmann, <i>et al.</i> Molecular cloning of a non-inactivating proton-gated Na ⁺ channel specific for sensory neurons. <i>J Biol Chem</i> . 1997 Aug 22;272(34):20975-8.	
mpp	B19	Waldmann, <i>et al.</i> A proton-gated cation channel involved in acid-sensing. <i>Nature</i> . 1997 Mar 13;386(6621):173-7.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	09/530,233
				Filing Date	April 26, 2000
				First Named Inventor	Philippe Sequela
				Art Unit	1646
				Examiner Name	Michael D. Pak
Sheet	3	of	3	Attorney Docket Number	PCI-017USRCE2

<i>MDP</i>	C1	Waldmann, <i>et al.</i> H(+)-gated cation channels: neuronal acid sensors in the NaC/DEG family of ion channels. <i>Curr Opin Neurobiol.</i> 1998 Jun;8(3):418-24.	
<i>MDP</i>	C2	Weille, <i>et al.</i> Identification, functional expression and chromosomal localisation of a sustained human proton-gated cation channel. <i>FEBS Lett.</i> 1998 Aug 21;433(3):257-60.	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	MICHAEL PAK	Date Considered	9-30-07
-----------------------	-------------	--------------------	---------